Why Governments Should Actively Promote Technological Innovation

Horovetska, Julia

Veröffentlichungsversion / Published Version
Zeitschriftenartikel / journal article

Why Governments Should Actively Promote Technological Innovation

Date of Publication: Nov 03, 2016 *IndraStra Global*

By Julia Horovetska

Since the 1980s, neoliberal ideas have determined economic policies around the world. The, perhaps, main principle of neo-liberalism is that interference of government in the economy should be minimal. According to Johanna Bockman: “neo-liberalism is grounded on the assumption that governments cannot create economic growth or provide social welfare; rather by trying to help, governments make the world worse for everyone, including the poor”. Those able to generate growth and welfare are, instead, markets, private companies, and individuals. Many politicians and economists thus believe that the role of government should be limited to a market correction.

A neo-liberal approach to economic policies formation made sense when governments aimed to spur economic growth via trade liberalization, promoting economies of scale, expanding international markets, and development of financial markets. Free flow of goods, capital, and labor favored conditions of minimum governmental intervention.

AIDN0021120160004 / INDRASTRA / ISSN 2381-3652

Nowadays, however, it seems that free trade has run out of its potential to spur feasible long-term economic growth. Recently, it has become clear that innovations may become more important for growth. Some disruptive innovations, such as self-driving electric cars, programs, and services based on Artificial Intelligence, etc. have started to reshape entire markets. Reacting to markets change, leading economies such as the US, the EU, China, Japan, South Korea, Russia, and others have become more interested in innovations creation.

Technological development was known as a factor of economic growth for a long time, yet recently its perceived weight in securing a country's success has increased significantly. Arguably, this has happened due to the economic repercussions of the so-called 'fourth technological revolution'. According to the World Bank's report "Innovation for Development and The Role of Government: A Perspective from The East Asia and Pacific Region," various "theoretical and empirical evidence demonstrates the positive correlation between innovation performance and economic development. Recent studies indicate that technological progress is the cause of more than one-half of the growth of the U.S. economy".

As the main factors spurring economic growth are changing – at least in the perception of officials and business leaders of leading world economies –approaches to the formation of economic policies have been changing too. In her book "The Entrepreneurial State: Debunking Public vs. Private Sector Myths" Mariana Mazzucato calls on governments to depart from their usual economically passive role and to start acting like entrepreneurs, i.e. making investments in R&D and innovations, taking risks, setting up production or shaping markets – and thereby promoting economic growth.

Why Mazzucato could, with her dirigist prescriptions, right today? The answer has to do with the nature and course of major innovations. Technological innovations may be just some improvements to already existing products, services, and processes. But they may also amount to so-called disruptive innovations which result in principally novel products or services thereby creating entirely new or reshaping fundamentally already existing markets and industries – and, thus, be associated with especially high profits. Yet, on the other side, from a disruptive innovation's occurrence to its full implementation and profitability – if the latter comes about at all – much time can pass and often has passed, in the past.

Disruptive innovations are usually:

(a) Resources-demanding, i.e. demands especially high amounts of finance, skilled labor, specialized knowledge, available technologies and production capacities, and sufficient concentration of these resources as well as their proper management;

(b) Highly risky, i.e. associated with so-called Knightian uncertainty that cannot be measured with known instruments of risk and probability identification.

These peculiarities of disruptive innovations suggest that it needs a government driving innovations development to give it a high chance of being successful. Only nation-states or powerful supranational structures (like the EU) possesses enough resources and motivation to mobilize simultaneously significant finances and adequate workforce for large, yet uncertain research in new directions, and experimental design of new technologies. Only they can provide the necessary infrastructure, and capacities to manage all the factors needed to make disruptive innovations happen and become applicable.

In the case of developing countries, however, such an approach to innovative activity will often not work due to the poverty of the governments, high levels of corruption in the state apparatuses, underdeveloped infrastructures, lack of sufficiently skilled labor, etc. The role of an investor into an innovative project and risk-taker may, to be sure, also played by a private sector actor, and more precisely by a powerful economic tycoon. Yet, this constellation contains the risk to deepen a country's economic dependence on one magnate or a group of magnates, i.e. the possibility of "oligarchy." Thus, a smart cooperation of the state with the private sector may often be the most suitable way to achieve sustainable innovations development.

Yet, even in such cooperation should preserve a certain balance. As US experience has shown, government-business cooperation may become a "play in one gate," when the risks of trying to innovate are socialized and losses simply become public expenditures, yet the rewards end up largely in private hands. Thus, Mazzucato warns, in her seminal book, that in the state-private business interplay to achieve innovations it is important to "socialize both risk and reward" (Mazzucato: 2015).

Finally, according to findings of such scholars as Aghion and Griffith as well as Blundell et al., the capacity of innovations driving growth are not unlimited. "At the higher level of competition, firms innovate less when the intensity of innovations increases" (World Bank: 2009). Thus, the more the public and private sectors spur competition among innovative projects development, the faster they may regard innovating further as not any longer profitable because of, for instances, lower rates of return. This does not mean that governments should not follow Mazzucato's proposition to take an active part in promoting innovations and respective markets. Rather, the relevant ministries have to keep also in mind those conditions that can decrease innovative activity, in order to keep it going.

About the Author:

Julia Horovetska is a Friedrich Naumann Foundation scholar in the Master's program on the political economy of European integration at the Berlin School of Economics and Law.

References:

1. Bockman, J., (2013): Neoliberalism, in: Context 12 (3), p. 14.

2. Mazzucato, M. (2015): The Entrepreneurial State: Debunking Public vs. Private Sector Myths, Public Affairs, New York.

3. The World Bank (2009): Innovation for Development and The Role of Government: A Perspective from The East Asia and Pacific Region, Fan Q., Li K., Zeng D. Z., Dong Y., Peng R. (eds.), Washington, p. 35.

Cite this Article:

Horovetska, J. "OPINION | Why Governments Should Actively Promote Technological Innovation", IndraStra Global Vol. 002, Issue No: 11 (2016) 0004, http://www.indrastra.com/2016/11/OPINION-Why-Government-s-Should-Actively-Promote-Technological-Innovation-002-11-2016-0004.html | ISSN 2381-3652